DownToEarth | डाउन टू अर्थ

Climate Change

2022 too short, too far: Data stories that show the true impact of climate change this year

Did you know that India experienced extreme weather events on 291 of the 334 days from beginning of year to November 30?

By DTE Staff

Published: Thursday 29 December 2022



Photo: iStock

Most of us have felt the impact of climate change and environmental degradation in our immediate surroundings: The shorter winters, greying skies, the disappearing birds and butterflies, the vanishing inland waterbodies and the noxious air.

But it is only when we look at data do we understand the global scale of these problems. In India, for instance, climate change-induced extreme weather events wreaked havoc throughout 2022.

Heatwaves, cyclones, cloudbursts, floods and a few other of these disasters ravaged almost every part of the country this year in unprecedented intensities.

In individual pockets, they may have manifested themselves as sporadic incidents. But did you know that India experienced extreme weather events on 291 of the 334 days from beginning of year to November 30?

In the last 50 years, 69 per cent of mammals, birds, amphibians, reptiles and fish have been wiped out from the face of the earth, the Living Planet Report 2022 by the World Wide Fund for Nature (WWF) showed.

From 2020, the world can emit only 400 gigatonnes of carbon dioxide to keep global warming within 1.5 degree Celsius over pre-industrial levels, according to the revised estimate published in AR6. But at present, global carbon emissions are around 40 gigatonnes.

Without such statistics, it would be impossible to quantify the scale and speed of damage done by climate change or understand the urgency with which mitigation policies need to be shaped and adopted.

Down To Earth (DTE) tried to highlight every such data from this year's analysis across affected sectors. To make numbers more easy to understand, *DTE* also launched '<u>Data Centre</u>' this year for in-depth data visualisation of the topics such as natural disasters, public health, forest cover, among others. We have also put together a live tracker of extreme weather events in the country that is updated every month. Check out <u>India's Atlas on Weather Diasters</u>.

Here are some of such stories from 2022:

Human imprint is evident in 71 per cent of the 504 extreme weather events witnessed across the Earth between 2003 and 2022.

Read more: The 2022 extreme weather events linked to climate change

In India, carbon dioxide emissions in 2017 were 62 per cent higher than that in 1990. The energy sector emits the highest share of CO2 in the country.

Read more: Here's how much carbon budget is estimated to be exhausted by 2030

India is home to 72 per cent of the 750 million people exposed to climate change hazards in south Asia.

Read more: These are India's climate hotspots

Places in the west Indo-Gangetic plain like Punjab and Haryana are likely to become vulnerable to droughts.

Read more: What will be the climate impact on Indo-Gangetic plain

In the past 30 years, the mean temperature of the Himalayas went up by 0.6°C.

Read more: How the Indian Himalayan region has been altered by climate change

Six of the 11 states in central and peninsular India will witness a temperature rise of 1-4°C by 2100.

Read more: What will be the climate impact in central and peninsular India

By the end of the century, the maximum temperature is likely to increase by 4-4.5°C in Rajasthan and by 3-3.5°C in Gujarat.

Read more: Climate change: How India's desert states will be affected

India has a forest cover of 77.53 million ha. But recorded forests—the area under the forest department— with forest cover are only 51.66 million. This gap of 25.87 million ha—a size bigger than Uttar Pradesh— remains unaccounted

Read more: Missing forests: A third of recorded forest area not assessed in latest govt survey